

# GROUND WATER SURVEY

township of caradoc police village of mount brydges and campbellville and pine ridge subdivisions

p. f. mckenna

1973

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Ministry of the Environment

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# MINISTRY OF THE ENVIRONMENT

TOWNSHIP OF CARADOC
POLICE VILLAGE OF MOUNT BRYDGES
AND
CAMPBELLVILLE AND PINE RIDGE SUBDIVISIONS

GROUND WATER SURVEY

P. F. McKenna

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# TOWNSHIP OF CARADOC, POLICE VILLAGE OF MOUNT BRYDGES, AND CAMPBELLVILLE AND PINE RIDGE SUBDIVISIONS

## INTRODUCTION

At the request of the Project Development Branch, the Water Quantity Management Branch carried out a ground-water survey in the Police Village of Mount Brydges, and in the Campbellville and Pine Ridge subdivisions in the Township of Caradoc. The objective of the survey was to evaluate local ground-water conditions and to locate test-drilling sites where municipal well-water supplies could be developed if ground-water conditions were found to be favourable.

The study was confined to an area within a three mile (4,8 km) radius of Mount Brydges. The field work consisted of the examination of geologic and topographic features, and the collection of well-water samples from selected wells for chemical analyses.

The water-well records and the logs of representative oil and gas test wells are summarized in Tables 1 and 3, respectively. The locations of the water wells were field checked and are shown in Figure 1. The well numbering system used in this report relates to the permanent coding numbers of the Ministry of the Environment.

## PRESENT SUPPLIES AND WATER REQUIREMENTS

Most residents within the Mount Brydges area obtain water for domestic, industrial, and agricultural use from well

points and from dug and drilled wells which terminate in the overburden or the bedrock.

The population of Mount Brydges is 1231, according to the 1972 Municipal Directory. The District Engineers Section of the Sanitary Engineering Branch has estimated that the population will increase to 2,000 by the end of the 20-year design period. Assuming a maximum-day to average-day demand ratio of 2.25 to 1 and an average daily consumption of 80 gallons (0,36m³) per capita, a well-water supply capable of yielding 110 gpm (720 m³/day) on a perennial basis and 250 gpm (1640 m³/day) on a short term basis should be developed for Mount Brydges.

The District Engineers Section reported that the Campbellville and Pine Ridge subdivisions comprise a total of 90 lots, have a population of approximately 360, and are fully developed. Assuming a maximum-day to average-day demand ratio of 3.0 to 1 and an average daily consumption of 80 gallons (0,36m³) per capita, a well-water supply capable of yielding 20 gpm (130 m³/day) on a perennial basis, and 60 gpm (390 m³/day) on a short term basis, should be developed for the Campbellville and Pine Ridge subdivisions.

## **GEOLOGY**

#### Bedrock

The Mount Brydges area is underlain by tlat-lying Devonian limestones and shales of the Hamilton Group of formations. The rock consists principally of thick zones of

grey and bluish, soft shale with thin zones of weathered, grey and bluish semicrystalline limestone. The logs of the oil and gas test wells drilled in the vicinity of Mount Brydges indicate that the Hamilton Group is 56 feet (17m) thick.

The Dundee formation, the basal formation of this group, subcrops southwest of Mount Brydges. The rocks of this formation consist of grey and brown limestone and magnesium limestone, calcareous sandstone, and chert, with small quantities of gypsum.

The Hamilton Group is underlain by the Detroit River Group which consists of brown and tan microcrystalline dolomite and limestone.

The bedrock does not outcrop within the study area. The regional slope of the bedrock surface is from the northeast to the southwest. South of Mount Brydges the bedrock surface slopes in a southerly direction at 25 feet to the mile (4,7m) per km).

## Overburden

The overburden in the study area consists primarily of Pleistocene deposits of glacial origin with minor deposits of Recent sediments.

During Wisconsinan glaciation, three glacial lobes were active in the area, the Huron lobe, the Erie lobe, and a general glacial flow that traversed the area from the northeast to the southwest. The advances and retreats of these glaciers resulted in the deposition of several till layers and associated stratified deposits.

The surficial material consists of shallow deltaic deposits of fine-grained sand and silt. These deposits cover most of the Township of Caradoc and seldom exceed 30 feet (9m) in thickness. The sands and silts are underlain by a thick section of undifferentiated clay and clay till with interbedded lenses of sand and gravel. Several well drillers report that the basal unit of the overburden is a "hardpan", which is interpreted to be a consolidated till.

The overburden thickness is approximately 250 feet (76m) in the Mount Brydges area, and is 100 feet to 150 feet (31m to 46m) in the valley of the Thames River.

# HYDROGEOLOGY

# Bedrock

Several wells in the study area obtain water supplies from the limestone and shales of the Hamilton Group and the Detroit River Group. The deepest penetration of the rock by a water well is 93 feet (28m) reported in the log of well 5533. This well is completed in the Detroit River Group. Wells drilled to depth in the rock do not appear to yield additional water supplies. Well drillers' logs indicate that most wells encounter water near the contact between the overburden and the bedrock.

The specific capacities of the bedrock wells were all less than 1.0 gpm/feet of drawdown (21,5 m<sup>3</sup>/day/m) and averaged 0.3 (6,4). The low specific capacities are an indication of the generally poor water-yielding properties of the bedrock formations.

## Overburden

Most wells completed in the Mount Brydges area obtain water from the surficial deposits of fine-grained sand and silt. The wells seldom exceed a depth of 30 feet (9m) and have low static water levels which limit the available drawdown in the wells. Seasonal declines in the static water level have resulted in some wells being unable to meet even domestic demands. Well logs indicate that some dug wells have been deepened by drilling.

Few wells within the area of Mount Brydges and the Campbellville and Pine Ridge subdivisions have penetrated to the bedrock. The logs of those wells completed in the rock indicate the presence of some water-bearing formations in the overburden, and some thick untested sections of sand. The log of well 293 indicates that up to 55 feet (17m) of sand was encountered at a depth of 85 feet (26m). In other wells, drillers have reported that sand and gravel formations were encountered that were "dirty" or dry. These sediments probably contain silt and/or clay which would make the development of a high capacity well in this material difficult.

An extensive test-drilling program was carried out by International Water Supply Ltd. for the London Public Utilities Commission in the townships of Lobo and Delaware along the Thames River. Only one site, well site 811, was located where a well could be developed that would be capable of meeting the water requirements of a community the size of Mount Brydges.

Outside the study area and adjacent to the Thames River at a distance of 4 miles from Mount Brydges, the London Public Utilities Commission developed the "Komoka-Tunks" well field (see Figure 1) which is capable of delivering up to 6.0 million gallons per day (27,300 m<sup>3</sup>/day). From the well log data and the results of the pumping tests of the Komoka wells, the aquifer does not appear to extend beyond the Komoka area.

To the northwest, the City of Strathroy, which is situated on the same sand plain as Mount Brydges, obtains its supplies from the surficial sands. However, drillers' logs suggest that the surficial deposits at Mount Brydges are finer grained than at Strathroy.

The specific capacity of wells completed in the overburden in the study area, varied from 0.01 to 6.0 gpm/foot of drawdown (22 to 130 m³/day/m) and averaged 0.6 (13). However, the use of the specific capacity of domestic wells is not always reliable because of the type of well construction and the limited amount of well development.

## WATER QUALITY

Samples were collected from selected water wells to determine the chemical quality of the ground water in the over-burden and bedrock aquifers. The results of the analyses of the samples are shown in Table 2.

The analytical data were plotted graphically to segregate the sources of dissolved ions in the ground water, to determine whether changes in the chemistry of the ground water occur as it moves through an area and to identify related geochemical problems.

The chemical data indicate that the general quality of the water samples collected from the overburden wells met the water quality criteria of the Ministry. In general, the ground water is hard and in several samples the concentration of iron exceeded the Ministry's permissible criteria of 0.3 ppm for iron in public water supplies. However, the high iron concentration may be the result of particulate matter in the samples.

The poor quality of the water from wells 394 and 435/ with respect to sulphate and chloride concentration is deduced to be the result of the upward movement of ground water from the bedrock aquifers. Both wells are completed close to the overburden-bedrock contact.

The quality of the water from the bedrock is poor as is indicated by the results of the analysis of the sample collected from well 5533. The high concentrations of sulphate, total dissolved solids, and iron in the water sample exceeded the permissible criteria of the Ministry. Drillers' records report the presence of hydrogen sulphide gas in the bedrock aquifers. The logs for all wells completed in the bedrock and in the overburden near the overburden-bedrock contact reported that sulphurous water was encountered. It is deduced that most of the bedrock wells in the Mount Brydges area have been abandoned because of the poor chemical quality of the water from the bedrock aquifers.

#### FAVOURABLE TEST DRILLING AREAS

The selection of the favourable test-drilling areas

shown in Figure 1 is based upon the physical nature and distribution of the water-bearing formations, the reported well yields, the specific capacities of the wells and the chemical quality of the ground water.

The test-drilling program should be designed to test the aquifers in the overburden. The deepest test holes would be about 250 feet (76m). The test holes should not penetrate into the bedrock. At least five test holes would be required to adequately establish whether the aquifers in the overburden have the potential to meet the water requirements of Mount Brydges, and the Campbellville and Pine Ridge subdivisions.

# ESTIMATE OF COST OF TEST DRILLING PROGRAM

The estimated cost to carry out a test-drilling program is \$16,000.00. The cost includes the following:

Mobilization and demobilization	\$ 500.00
Moving and setting-up	1,400.00
Drilling	7,100.00
Development	1,400.00
Pumping Tests	2,700.00
Casing and Associated Materials	2,200.00
Total	\$15,300.00

In addition, \$700.00 would be required to cover the cost of items associated with test drilling but not covered in the contract. Such items include property options, ingress and egress facilities and temporary restoration of well-water supplies which may be interrupted during development and test pumping.

## CONCLUSIONS

It may be concluded that:

- Hydrogeologic conditions appear to be sufficiently favourable to warrant a test-drilling program.
- There is only a fair chance that the overburden in the Mount Brydges area has the potential to yield up to 250 gpm (1640m<sup>3</sup>/day) and a good chance that up to 60 gpm (390m<sup>3</sup>/day) could be developed for the Campbellville and Pine Ridge subdivisions.
- 3) Supplies of ground water might be developed from sand and gravel aquifers located in the surficial materials and at depth in the Mount Brydges area.
- The chemical quality of the ground water from the shallow overburden aquifers is generally satisfactory for municipal purposes. Water containing high concentrations of iron, sulphate, total dissolved solids, and hydrogen sulphide may be encountered near the overburden-bedrock contact.
- The chemical quality of the ground water in deep sand and gravel aquifers may deteriorate with pumping time through mixing with the poorer quality waters of the bedrock.
- The bedrock aquifers do not have the potential to yield large supplies. In addition, the chemical quality of the water from the bedrock aquifers is unsuitable for municipal use.

#### RECOMMENDATIONS

- 1) If test drilling is undertaken, it should be carried out in the favourable areas outlined in this report.
- Where favourable hydrogeologic conditions are encountered, extended pumping tests should be carried out to provide the hydrologic data necessary to determine the well yield, the aquifer coefficients, and the degree of interference with local wells.
- Water samples should be collected frequently during test pumping in order to determine the bacterial and chemical quality of the ground water and to establish whether changes in the chemical quality occur with extended pumping time.
- In accordance with Ministry policy, it will be necessary to provide for the restoration of well-water supplies that are outside the serviced area and that are affected by the operation of any new municipal well to such a degree that an adequate supply of water cannot be obtained by means of a shallow or deep well pump.

Prepared by:

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Approved by:

T. J. Kakutchik, Supervisor Surveys and Projects Section Water Quantity Management Branch

Date APRIL' 73
Prepared by B. BLAKEZY

Well No.		Location and Elevation			Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) (hrs)	Pumping Level (feet)	Quality	Use	Remarks, Log, etc.
802	LOB	688	I	lot /	LONDON PolloCo	year 9/61 INTERNATIONAL	Ø	100 5 CANNG	99	-	NO N BER FORM	ATER CINCS ATION		TH AB	TPSL 4 CSE GRUL, BLDS 8 GY CL, FNGRUL 79
															HD GY CLAY FFN GRUL 94 DARK GRAY SALE 99
803	11	775	Γ	2	MIDDLE SEX UNITED CHURCH CAMP	John No. 158	*	6	185	::	D	R	y	AB	DEY BEN SAND 34 " GRUL 40 " SAND 101
						_					0.001				BLUE CLAY 155 HPAN 185 GRAY SHLE 185
804	"	688	I	2	LONDON P.U.C.	9/6) INTERVATIONAL	Ø	100 5 CASINY	102	_	NO W BEF FORM	ATER EING HTIOU	,	TH	CSE GRUL BLDS 18 GY CLAY, FINE GRUL 94 DK GY SHLE 102
805	"	750	I	3	LONDON P. U. C.	B/61 INTERNATIONAL	P	5	103	<i>+9'8'</i>	NO TEST	-	FR	TH	TPSL 3 PACKED CSE GRUL 10 GY CLAY BLOS 55
															CIRUL, SAND, SILT 92 GY CLAY, GRUL 97 GY SHIE 103
806	"	690	I	4	LONDON P.U.C.	8/GI INTERNATIONAL	P	2	109	2	NO TEST	-	FR	TH	TRSL 4 BRUN SPND, GRUL 9 GY CLAY, BLDS 20 GY CLAY, STNS 65
									-						GRUL, SAND TT GYCLAY FU.GRUL IN GYSHIE CLATING
807	"	691	I	4	LONDON PolloCo	TUTELATIONAL	φ	2	102	<i>+9'8</i> "	NOTEST	_	FR	TH	TPSL 4 30 CIEVE BLOS 10 CLAY BLOS 30 CEMENTED CRUL 30.5
					_										GRUL, SAND SILT 80 CLAY, GRUL 98 CAY SHLE 102
811	"	690	I	4	RONDON POUOCO	INTERNATIONAL	B	CASILY, Pulled	90	FLCAS AT G.L.	200/	31	FR	TH AB	TISL 4 30 CRU BLDS 13 CY CLAY BLDS 30 HARD CENENTED CRUL 30.
7-049															CLAY, GRUL 90 1-20

Table / Summary of Water Well Records

Date APRIL '72
Prepared by B. BLAKELY

													1		
Well No	Location and Elevation	con		Owner	Driller year & /64	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) (hrs)	Pumping Level (feet)	Quality	Use DO	PRDG 19	DEPTH DAILR TUUND 36 39
252	TWR 789	I	15	STEVĒKYSKO	WM. DALE	•	4	48	18	5/8	41	FR	ST	MUDDY SAND 22 BLUE CLAY 35 FINE SAND 39 BLUE CLAY 43 MUDDY SAND 48	
253	CARABOC TWP. 800	J	16	HEVEYHENEV	12/60 J.H.WEAVER	•	1/4	32	16	8/1	HD	FR	FARA	BRUN GSNO 52	16
5397	" 790	I	16	C. SOETEMANOS	ROY HUDSON	•	36	19	6	5/	12	FR	20	BRUN SAND 19	6
4358	" 780	I	17	PETER GLOCKNER	RONSMITH	×	FULLED	105	-	D	R	Y	AB	SANDY LOAM ? BRUN SAND 31 BLUE CLAY 42	
	,,,,													SANDY BLUECIAY BLUECLAY 105	72
4357	" 780	Z	17	PETER GLOCKNER	RONSMITH	•	5	205	3/	10/10	, 90	FR	FARM	SANDY LOAM I BRUN SAND 16 BRUN CLAY 31 BLUE CLAY 155	200
														STORY BLUECLAY A COARSE SAND 203 MUDDY SAND 205	\$ EVER 190
4654	" 790	1	19	LOUIE GRAHAM	ROY HUDSON		36	17	6	2/2	14	FR	80	SAND 17	6
4655	" 790		19	BEHKUSHAW	Roy HUDSON		36	17	4	2/2	14	FR	DO	SAND 17	4
5496	" 790	I	20	W.J. CHAUVIN	Roy Huoson		36	20	10	1	14	FR	PO	BRUD SAND 20	/0
SEE 565/															
27.049						n									2-20

Table / Summary of Water Well Records

Date APRIL'70

Prepared by S.BLAKEZY

Well No.		Location and Elevation		let	Owner	Driller year	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) (hrs)	Pumping Level (feet)	Quality	Use	Remarks, Log, etc.  DEPTH  LYPTETE  FOUND
5650	CARA. TWP.	57.70.90	Z	20	N.J. CHAUVÎN	RONSMITH	•	1	26	14	4/2	DIRECT	FR	DO	BRUNSAND, CLAT & 22 BRUNSAND, SILT 22 GREY, SAND 26
5651	21	790	I	20	W.J. CHPUVIN	RON SMITH	•	1	34	20	3/2	DIRECT	FR		PRDG # 5496 20 20 EAND SILT 27 CLAY 34
255	11	207	I	21	STAN PEARSON	Roy Hupson		36	35	20	1/1	30	FR.	FARM	SAUD 10 24 SILTY BLUE CLAY 35
256	"	792	I	22	BERSENAS	2/61 HAROLD SECRES	7	5	305	_	D	R	7	AB	SAND 15 SIVE CLAY 45 SIVE CLAY 65
															FINE SAND 69 BLUE CLAY 153 GRUL HIPAN 168 BLUE CLAY 180
															HARD PACKED GRUL 215 BLUE CLAY 270 GUMMY CAREY ROCK 305
257	"	780	I	22	THE BERSENAS	MAURICE 5/61 BABUIK		30	52	34	3/		FR	CREEK HOUSES	BRIND TASK 20 34 BRIND SAND HO GREY SAND HAD TER SO GREY CLAY 52
								-			_				
07-049	,					la:									3-20

Table / Summary of Water Well Records

Date APRIL '73
Prepared by S.BLAKELY

II 18 II 18 II 18	JOHNL DODINGS CLAYTONE TROTH CAPADOC TWP.	10/6/2 To H. WEAVER 10/6/2 To H. WEAVER 12/6/2	•	36 14 14 14 14	39 20 17 16 20	18 10 9 9	3/2 8/1 8/1 6/2 20/2	32 Hd. Hd. Hd.	FR FR FR	DO TOBACIO AMEM	BRWC CLAY SAND 8 20 BRWD CLAY 20 BRWD SAND 39 CPEN WELL 10 BRUE CLAY '5 BLUE GSND 20 CPEN WELL 'I BLUE GSND 17 BLUE CLAY 11 TPSL ' YLLW SAND 9 WHITE SAND 9 WHITE SAND 5 NHITE SAND 5 NHITE SAND 5 NHITE SAND 5 NHITE SAND 5
II 18 II 18	CLAYTONE TWP.	J. H. WEAVER  12/58  15 JoH. WEAVER  10/62  JoH. WEAVER  12/62	•	11/4	17	9	8/1	Hd.	FR FR	DC BO	BROWN WARE SANIS IS BUE CLAY IS BUE CLAY IS BUE OSNOD 20  OPEN WELL II BUE OSNO IT BUE CLAY IT  TPSL I YLLW SAND S WHITE SAND 9 WHITE NATER SAND IL
II 18	CLAYTONE TROTH CARADOL TWP. SCHOOL PRETA	JoH. WEAVER 10/6/2 JoH. WEAVER 10/6/2 JoH. WEAVER	•	1/4	16	9	6/2	Hd.	FR	20	BLUE GSND 17 BLUE CLAY 11 TPSL ( YLLW SAND 5 WHITE SAND 9 WHITE NATER YND 16
II 18	CARADOL TWP. SCHOOL PREPA	JoH. WEAVER 10/62 JoH. WEAVER 12/62	•	14							VILLUS SAND 9 WHITE SAND 9 WHITE NATER SAND 16
	SCHOOL AREA	JoH. WIDWER	•	1/100	20	10	20/2	H.d.	FR	SCHOOL	TPSL SAUD 5
II 18	J.D. HEXDERSON		?								BRUN NATERSAND 20
				1/4	16	8	5/1	H.d.	FR	80	TPSL 1 YLLW SAND B BRUNNARRSAND 16
II 18	B. THOMPSON	Roy Hupson		36	14	3	5/2	11	FR	DO	FINE SAND 14
II 18	PHIL KEAY	1/68 RONSM1711	•	14	21	10	25/2	H.d	FR	00	BRUN SAND 11 CREY SAND 21
II /E	H. ELIENS	HADCO B/69		30	25	4	3/2	22	FR	DO	BLCK TOSL 6 BRUN SANDY CLAY 4 BRUN SAND "4 CREY SAND 25
		7.5	•	1	34	11	5/2	Hd.	FR	DO	BRIX FILL 4 15 BRUN SAND 15 GREY FINE SAND, CLAY 20 GRET FINE SAND 34
II 21	XOMI VANHEON	11/63 IE J.H. WEAVER		1/4	21	10	8/1	Hd	FR	DO TOBALLO FARA)	OPEN WEIL 12 GRET GSND 21
	II /E	II 16 M.SUTHERLAN	I 16 M. SLITHERLAND RON SMITH	II 16 M. SUTHERIAND RON SMITH •	I 16 M. SLITHERLAND RONSMITH 1	I 16 M. SLITHERLAND ROWSMITH 1 34	I 16 M. SLITHERLAND RON SMITH 1 34 11	# 16 M. SLITHERLAND RONSMITH • 1 34 11 5/2	# 16 M. SLITHERLAND RON SMITH • 1 34 11 5/2 Hd.	I 16 M. SLITHERLAND RON SMITH • 1 34 11 5/2 Hd. FR	II 18 M. SLITHERIAND RONSMITH   1 34 11 5/2 Hd. FR DO  IT 21 ROMI CANHEDIAN RONSMITH   1/63   1/1 21 10 8/1 Hd FR PRINCE

Table / Summary of Water Well Records

Date APRIL '73
Prepared by B. BLAKELY

Well No		Location			Owner	Driller	Well	Well	Depth	Static	Pumping	Pumping	Quality	Use	Remarks, Log. etc.	
		and Elevation	con	lot		year	Туре	Diameter (inches)	(feet)	Level (feet)	Test (gpm) (hrs)	(feet)				DEPTH WATER FOUND
5/9/	CARIA Twp.	0000 820	I	17	SLIPITER LULLABIES	Roy HUDSON		36	24	10	3/	17	FR	DO	BRIUN SAND 18 GREY SIND 24	10
275	"	815	I	21	ARTHUR VAN HECKE	JOHO WERVER	•	1/4	18	11	8/1	Hd	FR	DO	OPEN WELL 12 BRING OSNID 18	//
276	11	825	II	21	MR.M. McLEAN	D.S. LOUGHEED	•	64	60	29	1/2/	57	FR	200	TPSL I DIRTI SAND 54 FINE SAND 60	54
4356	^	818	II	21	BILL BOLINMEESTER	MERUN TONES	×	5	246	-	D	R	7	PB	DIRTY SAND 29 SCFT GRETCLAY FINNER SAND GO SOFT GRETCLAY	24
															BLUE CLAY 128 CREY CLAY 184 CEMI-NTED SAND CLAY HARD PAN	187
277	"	812	I	22	CHARLES WILCOX	Roy HUPSON		36 27	20	6	1/5	18	FR	DO	SAND 10 HARD-SANDY CLA	6
5664	,	<i>820</i>	I	22	TO MICHELLSEN	Roj Husson		36	38	20	3/	36	FR	DO	BRWW SAND 27 BLUE CLAY 38	<i>  ス</i> フ
5529	,,	820	I	18	RISEAL	RON SMITH	•	1	22	10	5/2	Hd	SA	20	BRUN SAND 17 GREY SAND 22	10
5656	,	820	I	18	JULIS PASCOA	KON SMITH	×	2	28	-	D	R	7	AB	SAND, SILT 28	97. ()
5655	,,	<i>820</i>	Π	18	T. PASCOA	RONSNIN	•	/	22	14	2/2	нd	FR	20	TPSL SAND, LAY SENN SAND 'E GRET SAND 22	4 18
447							-									
-			-	+				-		-						
07-049																5-20

Well No.		Location and Elevation			Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) ( hrs)	Pumping Level (feet)	Quality	Use	Remarks, Log. etc.  DE-PTH
			con	lot		year									NATER
4720	TWP.	00 c 800	团	//	MERUNO SMALL	169 ROD SMITH	•	4	32	8	7/2	23	F-R	ST	PRDC 20 25 SILTY BRWU SAND 25 FINE BRWN SAND 32
285	,,	790	山	12	НРЕОГО Ссисян	TOH WEAVER	•	14	29	17	8/,	Hd.	FR	DO	TPSL 1 BRUNCLAY 10 BLUE CLAY 15
						,									BRWN PUTTY-SAND 17 BLUE GISNIP 26 BLUE WATERSAND 29
286	· ·	78E	1 1		DR. H.M. GOUGH		•	1/4	35	15	8/1	Hd	FR	DC ST	OPENWEIL 20 15 BRUN GSND 30 BLUE GSND 35
4718	"	794	11	12	HAROLD GOUGH	RON SMITH	•	4	30	8	19/3	20	FR	200 ST	PRIX, 20 25 SILITIBRIUM SAND 25 FINE BRUN SAND 30
5415	"	794	Ш	12	Н СТОИСН	RONSMITH	•	4	33	12	10/4	28	FR	DO ST	TRSLI BRWN CLAY 12 GREY CLAY 20
															GREY SAND, SILTYSAND 26 GREY SAND 31 GREY CLAY 33
287	"	800	T	13	MURRAY CARRUTHERS	J.H. WEAVER	•	1/4	29	4	8/1	Hd	FR	Do	OPEN PIT 4 BRUN PUTTY SAND 12 CIRAY GISNO 18
2 3/2															HPAN 19 WHITE WATER SAND 29
288	,.	800	亚	13	WILERID WILCOX	JoHoWEDVER	•	1/4	28	28	8/1	Hd	FR	FARM	OPEN WELL 20 20 BRWN WATER SAND 28
289	"	800	亚	13	M. EILANDER	ROY HUDSON		36	25	4	5/1	20	FR	200	SANDY CLAY 20 20 SAND 25
07-049															6-20

Table / Summary of Water Well Records

Date APRIL'73

Prepared by B. BLAKELY

1951		C PROBLE			The same of the sa				A STATE OF STREET					
Well No.	Location and Elevation	con	lot	Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) ( hrs)	Pumping Level (feet)	Quality	Use	Remarks. Log. etc.  2011-17774  NATER  FUL'NO
5417	CARADOL TUP 820	TI.	13	To BRUININK	RUN SMITH	•	1	25	10	2/4	Hd	FR	20	TPSL 1 20 BRUN CLAY 10 GREY CLAY 20 GREY FSND 25
5413	" 800	111	13	T. BRUWINK	RON SMITH	•	1	25	10	3/4	Hd	FR	80	TPSL 1  BRUNCLAY 10  BREY CLAY 20  CRAY FSND 25
5246	" 810	711	14	Ms NOORENBERGHE	HADCO "/70		30	30	15	4/	25	FR	20	BICK TPSL 1 BRUNSOY CLAY 21 GREY BRUNSAND 30
5273	" 810	111	14	N. DOORENBERGHE	HADO "170	P	PULLED	280	_	-	-	34	AB	BRUN CLAY 20 BRUN SAND FCRUL 21 GREY CLAY & MARL SAND 90
2														GREY CLAY 190 CREY SOFT SHLE 279 BLACK SULPHUR RUCK 280
4993	" 810	W	17	MURRAY JAMES	25/10 2008 MITH	0	4	22	6	20/2	22	FR	00	SAND 14 14 WATER SAND 22
5348	" 810	Ш	17	CARADOC. TWP.	Roy Huoson		36	12	7	4/	12	FR	00	BRUNSANDE 7 BLUE CLAY 12
4773	" 818	I	18	B. HOLLANDIA	HADO		50	28	6	4/2	26	FR	IN	BRUN SANDY CLAY 3 G BRUN SAND 11 CHEY SAND 28
290	" 819	777	20	JOHN SZEREMEK	JoH. WEAVER	•	2	50	40	13/1	Hd	FR	100 TOBALLO FINEM	OPEN WELL 25 40 BLUE CLAY 40 BRUN FINE GRUL 50
<u>291</u> 5196	" 818	, W	21	C. MOSTRY	NARDS 4/53	•	2	21	15	2/	15	FR	TOBACU F-ARM	FINE GRUL 21
292	" 622	, #	21	CHARUE	ANDREW 3/54 ANHEAL	•	2	92	31.5	5/6	33.5	FR	JOBAKA FARM	TPSL, DIRTT SAND 24 \$5.97 CLEANSAND 30 SAND, CLAY, DIRTT SAND STAS CLEAN FINE SAND 92 85
07-049											ŭ.			7-20

Date APRIL '73

Prepared by B.BLAKELT

															Trepared of Significant
Well No.		Location and Elevation	con	1-4	Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm)(hrs)	Pumping Level (feet)	Quality	Use	Remarks. Log, etc. ロビアアト ム・ロア・ア FOUND
293	CARA	1000 1824	ZZ.		CHAS. MOSTRET	J. LOUNSBURY	#	6	290		GASEC WATE CASIN	XYS X, PUL	UĒD	AB	BRUNSANDY SOIL 53 BLUE CLAYES SAND 140
															BLUE GUMMYCLAY 227 BLUE SHLE 290
294	"	624	亚	21	CHAS. MOSTREY	JELOUNSBURY	•	6	66	26	4/5	40	FR	20	BRUN SAUDY SOIL 40 GO BLUE CLAY 65 NATER SAND 66
295	"	830	W	21	CHAS. MOSTREY	J.LOUNSBURY		6	85	_				AB	SAND FCLAY MIXED 20 SAND 47 DIRTY WATER GRUL 82 SANDES
296	"	830	W	21	CHAS. MOSTREY	Je Lawsbirt	1	6	88	22	30/8	40	FR	IR	SMAD! CLAYMIXED! DO 82 SANDY 1 NATER GRULE? SAND CE
297	"	821	亚	21	2	2005 NO TH	•	5	81	30	1%	ER.	FR	20 ST	SANDY LOAM 12 35,77 BLUE CLAY 35 MUDDLY SAND 48
															SANDY BLUE CLAY 77 FINE OREY SAND BI
2.049												•			8-20

Date APRIL '73

Prepared by B. BLPKLLY

								7						T	
Well No		Location and Elevation	con	let	Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) ( hrs)	Pumping Level (feet)	Quality	Use	Remarks. Log. etc.  DEPTH WATER FOUND
3//	CARA.	192	IV.		TED BLASZAZYK	I.H. NEAVER	•	1/4	35	6	8/1	Hd	FR	TOBAKA FARIN	BRUN PUTTY SAND 9 BUE CLAY 18
															GREY GSND 25 BLUE CLAY 26 GRAY GSND 35 BLUE CLAY 35
4712	"	790	N	12	JOE Zybura	ROWSMITH	•	14	35	15	10/6	DIRECT	FR	FARIN	BRUN SAND 7 BRUN CLAY 18
***************************************															BLUE CLAY 24 BLUN SAND 30 GRAY SAND 35
3/3	,,	785	īV	13	HERSERT BUTCHER	JoH. NEAVER	•	2	35	11	8/1	Hd	FL	FARM	OPENWELL 15 11,27 BLUE CLAY 27 BLUE PSND 35
5703	"	800	IV	14	D. ATIRIDGE	RONSMITH	•	1	37	15	10/2	Hd	FR	DO 57	TPSL I BRWN SAND SILT 15 GRET SAND, SILT 28 GRET SAND 37
314	"	810	IV	15	JOE VARGA	J.H. WEAVER		1/4	32	17	8/1	Hd	FR	TOSAUL	SELLUSAND 4 17 BELLUSAND 4 17 NHITE SAND 17
2															BRWN GSND 24 BLUE CLAY 25 BLUE GSND 32
5576	"	810	IV	16	FRANK HAPPL	ROW SMITH	•	5	68	27	11/4	45	FR	20	TPSL 1 BRWN SANDCLAY 14 BRWN CLAY 39
															BRUN FINE SALD 52 BRUN COND 68
315	"	817	10	17	V. STIENER	ROW SMITH		2	115	30	4/8	DIRECT	Fl	FARM	SAND FCLAY 90 90 SAND FCLAY 90 FINE WATEL SAND NS
-			i i												
07-049												8			9-20

Date AMEIL '73
Prepared by B. BLAKEZY

Well No.		Location and Elevation		7.8	Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm)(hrs)	Pumping Level (feet)	Quality	Use	Remarks, Log, etc.	LX-PTH NATER FOUND
3/6	CARA	810	IV.		J. STEINER	Roy Hussixo		36	16	3	5/2	12	FR	20	SAND 16 BLUE CLAY 16	3
4360		<i>820</i>	N	18	C.APPLEDOOD	Rot HUDSON		36	25	4	3/,	22	FR	BO	SANDWITH CLAY STREAKS 25	5 4
5182	rj	820	Ø	18	O. APPLEDOORD	Rot Husson		36	16	В	2/	15	FR	20	ELWISAND 16	8
4355	"	826	V	19	JUE MEKKER	RONSMITH	•	14	18	10	30/2	OILET	FR	DO FARM GPETN HOUSE	LOAMY SAND 1 BRUN SAND 18	12
317	11	829	図	20	No TOONER	Roy HUDSON		36	22	15	3/1	20	FR	200 ST	FNSD 22	15
325	"	799		1	STEVE KOUACS	JOHNEAUER	•	1/4	36	10	8/1	DIRECT	FR	FARM	YLLW SAND 4 WHITE SAND 5 YLLW BRUN SAND LT BRUN PUTTY SA	10 012 000 20
		AS 33 SA 18 18 18 18 18 18 18 18 18 18 18 18 18													RED CLAY 21 CSE WATER SANS GRAY OSNA 3	26
326	"	806	V	i8	STEVE KOUAC	JUHINEAUER	•	14	31	10	8/1	Hd	FR	TOBALLO FARM	TRE: 1	10,17
															BRWN CLAY 17 BLUE GSNXO 31	
						W										
P-1-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-																
07-049												54				10-20

Date APRIL '73

Prepared by J. BLAKELY

Well No		Location and Elevation	102	Care	. Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) (hrs)	Pumping Level (feet)	Quality	Use	Remarks. Log. etc.  DLPTH  いみでR  FOUND
5620	CARAL TUR	770		18	T. RASTIN	Roy Hubson		36	22	12	2/	19	FR	Do	BRWD SAND 6 12 BLUE CLAY 12 SAND 22
393	"	784	IN	19	RON O'NEILL	Roy HUDSON	¥	36	20		D	R	4	-	SAND 5 SANDY BLUE CLAY 20
394	,,	781	I N	20	ROW O'WEILL WILLIE DELEEMAN	S ALAL HEAL	•	4	216	45	5/10	60	FR	DO ST CREEN MUSE	
ANGEL 18 A															HARD BLUE CLAY FSTNS 205 HPAN 211 GRUL FHARD SANDY CLAY 216
395	"	770	ぶ	21	TOMANDURSON S. GRATION BILL MARTIN	Roy Hupson		36	16	8	05/1	14	FR	200	TPSL 26 B SAND 6 OSND 10 BLUE CLAY 16
254	"	774	I	21	S. GRATION	ROY HUDSON	I	36	20	_	D	R	Y	-	SANJO B BLUE CLAY 10 WET SANDING BLUE CLAY 20
396	"	767	T,	21	BILL MARTIN	Ro; HUDSOU		36	17	10	.5/	12	FR	00	SAUD 10 95ND 17
397	"	766	T,	21	KEN CHARL TON	ROT HUDSON		36	17.5	14	05/	16	FR	00	SAND 14 BLUE CLAY 17.5
398	"	766	I,	21	KENCHARL TON J. BAXTER	HADCO 7/67		30, 24	25	14	4/,	25	FR FR	00	TPSL 6 14,23 SAND 18 BLUE CLAY 22
															BLUE SAND 14 BLUE CLAY 25
399	,,	768	Į,	21	R. COOPER	Roy HUDSON		36, 27	18	8	.5/2	14	FR	00	SANDY CLAY 18
								-	-	-				-	11-20

Table / Summary of Water Well Records

Date APRIL 13
Prepared by B. BLAKELY

Well No		Location and			Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) (hrs)	Pumping Level	Quality	Use	Remarks, Log. etc.
		Elevation	con	lot		year		(inches)	rieeri	116617	(gpm)(ms)	i ce i j			WATER FOUND
4115	CARA. TWP.	DCC 740	IN	21	LOWER THAMES CONSERVATION ' HUTHCRITY	NEIL 6/69 STEINMAN	×	5	125	_	D	R	7	_	BRUND SAND 5 CTY. CLAY & SAND 16 GY CLAY & FINE SAND 51
															GRET CLAY 105 HARD GRET CLAY 120 GRET CLAY 125
4818	4	780	IN	21	WALLACE MAYS	SYDUZY 12/69 EARL	7	4	215.5	40				D0	BRUN SAND 4 140 GREY SAND 20 BLUE CLAY 140
															GREY HPAN 145 PINK CLAY 215 GREY SHLE 215.5
4947	,,	778	IN	21	T. JANSSEN	2/10 Roy Hupson		36	16	4	3/	10	FR	Do	BRUD SAND 16 4
4948	,,	778	IN	21	HENDRICAS TANSSEID	2/10 Roy Hudson		36	25	4	4/	20	FR	<i>2</i> 0	BRUNG SAND 4 4 BRUNG CLAY & SAND STRKS Q
5214		778	IN	21	DOUG LUCIS	RON SMITH	•	,	34	16	4/,		FR	Do	PROCY 16 SLUE CLAY 20 SAND. CLAY 32 CARLY SAND 34
5443	,,	760	IN	21	G. HILHORST	ROY HUDSON		36	24	9	3/	20	FR	20	BRWN SAND, CLAY 20 9 SAND 24
400	"	766	I,	22	J.C. THOMPSON	HAOX 0 7/64		30 - 27.5	20	10	5/1.5	20	R	Do	TPSL G BRUN SANDY CLAY D GRUL 'O BLUE CLAY 20
5658	,,	770	ADI DE 150	22	H.A. OGDEN	11/71		30	30		3/	29	FR	Bo	BRUN CLAY 12 13 BRUN SAND 15 GREY CLAY 30
401	"	712	Ī	23	DON FREDRICKSON	SYDNEY EARL	1	35/8 pulled	141	75	4/HR 10		FR	AB	RED SAND 16 CLAY 107 TILL, GRUL, SAND 112 GRET SHIE 141
7.30 50															
07-049															12-20

Date APRIL 172

Prepared by BLAKETY

# Table / Summary of Water Well Records

Well No.	Locati and Elevat	d tion	con	lot	Owner	Driller year	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) ( hrs)	Pumping Level (feet)	Quality	Use	Remarks. Log. etc  DEPTH  WATER  FOUND
402	CARADOO		r	$\neg$	STAN PEPRSON	Roy Huasan		36	16	7	2/3	14	FR	20	SAND 4 T GRUL 10 BLUE CLAY 16
403			$\overline{}$	23	ARLET B. PENFOLD	U.L.Pioceton		30	34	-	D	R	7	_	BRUN SAND 12 SANDY CLAY 30 GREY SAND 34
404	" 70	2	T	23	A. PENFOLD	HADCO 4/67		30	25	8	5 / TIM		FR	<b>PO</b>	BLUE MARL 25
4623	" 7"	40	I U	23	CARL J. ROES	Roy HUDSON		36	19	6	3/1	18	FR	DO	SANDS'GRULES G BLUE'CLAY 19
4622	" 7.	30	I N	23	JOHN ROES	Roy Hudson		36	43	30	25/	40	FR	20	SANDY CLAY 7 30 BLUE CLAY 30 FINE BAND 43
4810	" 7	140	I	23	JOHN ROES	Roy Huasan		36	25	8		22	FR	Do	SILT 4 CIRUL B BLUE CLAY SILT 25
405	" 6	80	I	24	LONDON P.U.C.	INTERNATIONAL	P	5	134		NO TEST			TH	TPS S BRUN SAND FINE GRUL IS COURSE GRUL, SAND 20 GREY CLAY, SILT 23
															GREY CLAY FINE GRUL 45 GREY CLAY CSE GRUL, SILTE GREY LMSN 73 GREY CLAY GRUL, SILT 88 FINE GRUL & SILT 109
															PANE GRILL & SILT, CLAY 121 DARK GREY SHLE 134
406	" 6	83	IN	24	LONDON P.U.C.	3/62 INTERNATIONAL		5	136		NO TEST			TH	TPSL 4 BRUN SAND FINE CRUL 9 CSE GRUL, SAND 13 GREY CLAY, FINE GRUL, SILT 80
						2									CSE GRUZ, SANDSILT 112 CRET CLAY, FINE CIRUL 131 CRAY CLAY, SHLE 136
····															11 12 13 14
												*			13-20

Table / Summary of Water Well Records

Date APRIL '72

Prepared by B. BLAKELY

Well No	lori	ation			Owner	Driller	Well	Weil	Depth	Static	Pumping	Pumping	Quality	Use	Remarks: Log. etc.
	Elev	nd vation	con	lot	User Carrie estal	1000 A 100000 A	Туре	Diameter (inches)	(feet)	Level (feet)	Test (gpm) (hrs)	Level (feet)	***	Ř	DEPTH WATER FULLO
407	CARADO	700	I	24	CHRIS MATON	MM. DALE	*	5	195	60	4/6	150	ક્લ	AB	TIPSL 2 148 170 SAND FGRUL 13 BRUN CLAY 17
															GREYCLAY ,42 GREYCLAY &STNS 96 DIRTY SAND 100
															BRUN CLAY 123 DK BRUN LMSN 146 BRUN LMSN & SH STRKS 195
408	" 70	04	IN	24	CHRISMATON	ROYHUDSON		36	20	12	TOO SLOW TO TEST	HAND PUMP ONLY	FR	00	SAND 6 12 GRUL 12 BLUE CLAY 20
20															
8															
<b>9</b>															
*															
		-													
							-								
51							+					58			14-20

Table / Summary of Water Well Records

Date APRIL 1973

Prepared by B BLAKELY

Well No		ocation and levation			Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) hrs)	Pumping Level (feet)	Quality	Use	Remarks, Log. etc.	DEPTH WATER FUUND
4621	CARAD TWP	280	I S	19	Z.DELANOWSKI	Roy Hudson		36	17	7	14/1	14	FR	Do	BRUN CIAY IC SAND 17	10
5035	11	780	I S	19	E.A. WEBSTER	HADCO 6/10		30	24	14	2/	23	FR	Do	TPSL. I SANDY CLAY E. MARL SAND 14	14
						p /au									CLAY 19 MARL 22 CLAY 24	346
5533	"	778	I S	19	F. LAZARAVICH	HADCO	•	5	340	30	6/1	150	Su	Do ST	BICK TPSL I BRWW SAY CLAY GREY CLAY 140 BRWW SAND & GRU GREY CLAY & HPAN	247
			T		Town)	5/58	N-4		0				2		BRUN ROCK 340	
418	"	776	IS	20	VANDERVEDEN	SYDEARL	F	4	182		D	R	7	_	SILT 140 HIPAN 181 CY SHIE 182	
419	"	711	I S	23	J. CARROLL	SYD EARL 12/66 Roj Hudson		36-10° 27.1%	38	12	05/12	33	FR	PO	SAUD 12 OSND 15 BLUECLAY 38	12
					<b>A</b> 1											
07.048																15-20

Date APRIL 13

Prepared by B BLAKELY

Well No.	N	Location and Elevation			Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) (hrs)	Pumping Level (feet)	Quality	Use	Remarks, Log. etc.  DL-DTH  WATER
425	AND THE STREET, STREET	WARE 690	20	lot j	KONDON POUOC.	12/61 INTERNATIONAL	Ą	NO 5 CASING	80	-	100 PEMPINI	ş-	-	AB TH	TPSL 3 BRU SANDFNGRUL 19 HARD CENENTED FRORULZI
									fi.						GY CLAY SILT 76 GY SHLE, LMSN BO
426	,,	692	8	,	LONDON PolloCo	12/61 INTERNATIONAL	R	NO 5 CASNY	86	_	-	_	200	AB TH	TPSL 2 CSL SAND, GRUL 14 GY CLAY SILT CSECRUL 63
					= 7										CEMENTED CSE GRUL 71 HARD CARAY CLAY 84 GY SHLE 86
427	"	690	B F	1	LONDONO P.U.Co	1/62 INTERNATIONAL	Q	DO S CASING	98.5	-	-	-	-	AB TH	TPSL 1 CSE GRULSAND 12 GY CLAY CSE GRUL 73
															GYCLAY FN GRUL SILT 96 GYCLAY, SHLE 98.5
428	,,	690	e	/	LONDON Pollo Co	INTERVATIONAL	Q	NO CASING	105	-	_	_	_	AB	TPSL 2 BRNCIAY 12 CSE GRUL BLDS.CLAY 20 GY CLAY FN GRUL 49
															CEMENTED FN GRUL 51 HARD GY CL FN GRUL 10: DK GY SHLE 105
430	11	690	8 F	2	LONDONO POUS CO	INTERNATIONAL	Ø	S CASING	96					AB TH	TPSL 2 BRUN SAND & CSE GRUL! SAND 20
															GY CLAY FNORULGI HD FN GRUL 64 GY CL FN GRUL 96
431	,	691	BF	2	LONDON PolloCo	1/62 INTELWATIONAL	Ø	CASING	, 111					AB TH	CSEGRUL BOWN SAND 9 GY CLAY FNGRULGE GY CLAY FN GRUL SILT 10 GY CLAY SHLE III
												-			16-20

Date APRIL '73

Prepared by B. BIAKERY

Well No.		Location and Elevation			Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) ( hrs)	Pumping Level (feet)	Quality	Use	Remarks, Log. etc.  DEPTH 1017ER
432		INALE 691	e e	2	LONDON PolloCo	2/62 [WTE: <b>200</b> 7/00040	Ø	NO S CASING	132	-	_		_	AB TH	TPSL Z FN BRN SAND Y CSE CRULBENSAND 12 GT CLAT FN CRULBB
-		<i>C</i> //													GY CLAY CSEGRUL 104 GY CLAY FN GRUL 109 CSEGRUL CLAY 117 GY CLAY SHIE 132
433	20	690	B	2	E.4. HAGGIS	HOSIEGRIST	•	5	130	112	4/6	122	FR	10	TPSL ? 130 CLAY 65 DRY GRUL 66
															CLAY TE HPAN 130 ROCK 130
429		701	B F	2	UNCE KAMY	J.B. JOHUSTOU	•	4	80	1.5	5/5	7.5	FR	20	TPSL 1 CSE DETGRUL 12 BLUE CLAY 70
		····•													CARUL SAND, SALT 72 GY SHIE 80
434	"	700	B	2	GEO WEBSTER	T. LATHUSKY	ø	5	87	_	-	-	su	AB	BLUE CLAY 40 87 BLUE CLAY 62 BLUE CLAY 62
															DRY GRUL 80 HPAN & 7 WATER GRUL 8 7
435	,,	690	₽. ;=	3	LONDON POLLOGO	2/62 INTERNATIONAL	Ø	NO SASING	117	-		_	-	AB	TPSL 2 CIYCLAY FNORUL 91 FN CIY SAND GRUL SILT 98
															GRAY CLAY, CARUL SILT 112 GYCLAY, SHLE 117
436	"	690	P.	3	LONDON PolioCo	INTERNATIONAL	Ø	NO S CASING	136	-	-	-	-	AB TH	TPSLY BRN SPYCLAY LARVL 16 GYCLAY FN GRUL SULT 12
		<u> </u>													GYCLAY CEMENTED GRULTS FN CRUL SILT 130 GYCLAT, SHLE 136
07-049			1												17-20

Table / Summary of Water Well Records

Date APRIL'73
Prepared by B.B.LAKEZY

		Level (feet)	Pumping Test (gpm) (hrs)	Static Level (feet)	Depth (feet)	Well Diameter (inches)	Well Type	Driller	Owner			Location and Elevation	Well No.
AB TH	. =	_		-	116	NOO 5 CASNY	Ø	Z/62 INTERNATIONAL	LONDON P.U.C.			Security of the Company of the Compa	//7-
		ĺ											
AB	_	_	_	-	110	NO EASNYS	Ø	2/62 International	RUSCO	3	B F	" 684	438
AB	7	R	Ð	_	165	5	500.5	J. LOUNSBURY	DONALD SEABROOK	4	B	" 770	439
AB					132	100 5 CASING	Ø	Z/62 INTERNATIONAL	LONDON P.U.C.	4	B	" 690	442
AB TH					132	NO 5 CASING	Ø	INTERNATIONAL	LONEOR P.U.C.	4	BF	" 680	443
AB					/36	casing	Ø	TWRIENATIONAL	LUNDON P.U.C.	4	B	<i>"</i> 879	444
								9					
B B B B B B B B B B B B B B B B B B B	A A A A A A A A A A A A A A A A A A A	Y A	A	An	An	110 And 110 And 110 And 110 -	116 77  NO 5  ASAUS 110 A  TO STAND 132  NO CHSING 132  NO CHSING 132  NO CHSING 138  NO CHSING 138  NO CHSING 138  NO CHSING 138  NO CHSING 138	A CASAUS 116 77  A CASAUS 110 A  TO SENS 132  A CASAUS 138  A CASAUS 138  A CASAUS 138  A CASAUS 138	INTERNATIONAL & CASALS 116 77  INTERNATIONAL & CASALS 110 77  ILLOUNSBURY \$ 5 165 - B R Y A  INTERNATIONAL & CASALS 132  INTERNATIONAL & CASALS 138  INTERNATIONAL & CASALS 138  INTERNATIONAL & CASALS 138	ADDRESS TOTERNATIONAL $\mathcal{A}$ CASING $116$ — — — $\frac{7}{7}$ $\frac{7}{7$	3 LONDON TUTERNATIONAL $A$ CASAN, $A$ LONDON TUTERNATIONAL $A$ CASAN, $A$ LONDON TUTERNATIONAL $A$ CASAN, $A$ LONDON TUTERNATIONAL $A$ SEABLOOK TUTERNATIONAL $A$ CASAN, $A$ LONDON TUTERNATIONAL $A$ CASAN, $A$ CASA	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} $	The office of the state of the

Table / Summary of Water Well Records

Date APRIL 173

Prepared by D SIMITH

Well No.	Location and Elevation			Owner	D∞iller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) (hrs)	Pumping Level (feet)	Quality	Use	Remarks, Log, etc.	DEPTH WATER FOUND
	DELAWARE TWP 680	B F	4	LONDON P.U.C	year 9/62 INTERNATIONAL	Ø	NO 5 CASING	136	-	å	-	-	A B TH	FRSL 4 GRWNCLAY 15 LEMENTED FNGKUL	
	650			7.4.0											91
				2										CSE GRUL, SILT I	10 WB 6 WB
															136
446	relaware Two	B F	4	BERT MEYERS	ROY 12/62 HUDSON		36	16	3	20/1	12	FR.	DO	TPSL 2 SAND 6 BLUE CLAY 16	3
448	DELAWARE TWP 710	BF	5	TIVAN DEN BOOM	H. SIEGRIST	F	5/2	185	28	_	-	SALT T SULFH.	AB	SAND 14 BLUECLAY 135 SLATE HP 175 GY ROUK 185	180
449	DELAWARE TWP 710	5	5-	T. VANDEN BOOM	H SIEGRIST	•	51/2	111	30	5/7	60	FR	DC	SAND 15 OLUE CLAY 110 Sand + SMALL STONES 1	
450	DELAWARE TWA TOB	BF	5	DEPT. OF PUBLIC WERKS	RUY HUDSON		30	20	8	20/1	8	FR	,203.7 0.35.	TPSL I GRUL 9 BLUECLAY 20	8
451	ELAWARE TWP 710	B	5	G.F. NOYES	HADCO WELL DIGGING LTD		30	30	16	2 R26	30	FR	DO	TPSL 1 BROWN CLAY 7 BROWN SAND 10 BRUE CLAY 16	16-23
								Š						BLUE SAND 22 BLUE CLAY 23 BLUE SAND 30	
452	LELANARE TWP 705	B	5	G MPNICOM	ROY 8/64 HUDSON		36 27	13	5	2/1	10	FR	DO	FRUL 8 ELUZCAPY 13	5-
453	DELAWARE TWP 710	BF	5	JOHNSON	HADEC WELL 8/65 DIGGING LTD.		30	28	20	. <del></del>	-	FR.	00.	BROWN SAND 6 BROWN SAND 28	20
	1 7/0	+	T			ļ				1					19-20

Table 2 Summary of Water Analyses

Prepared by PFM= Janna

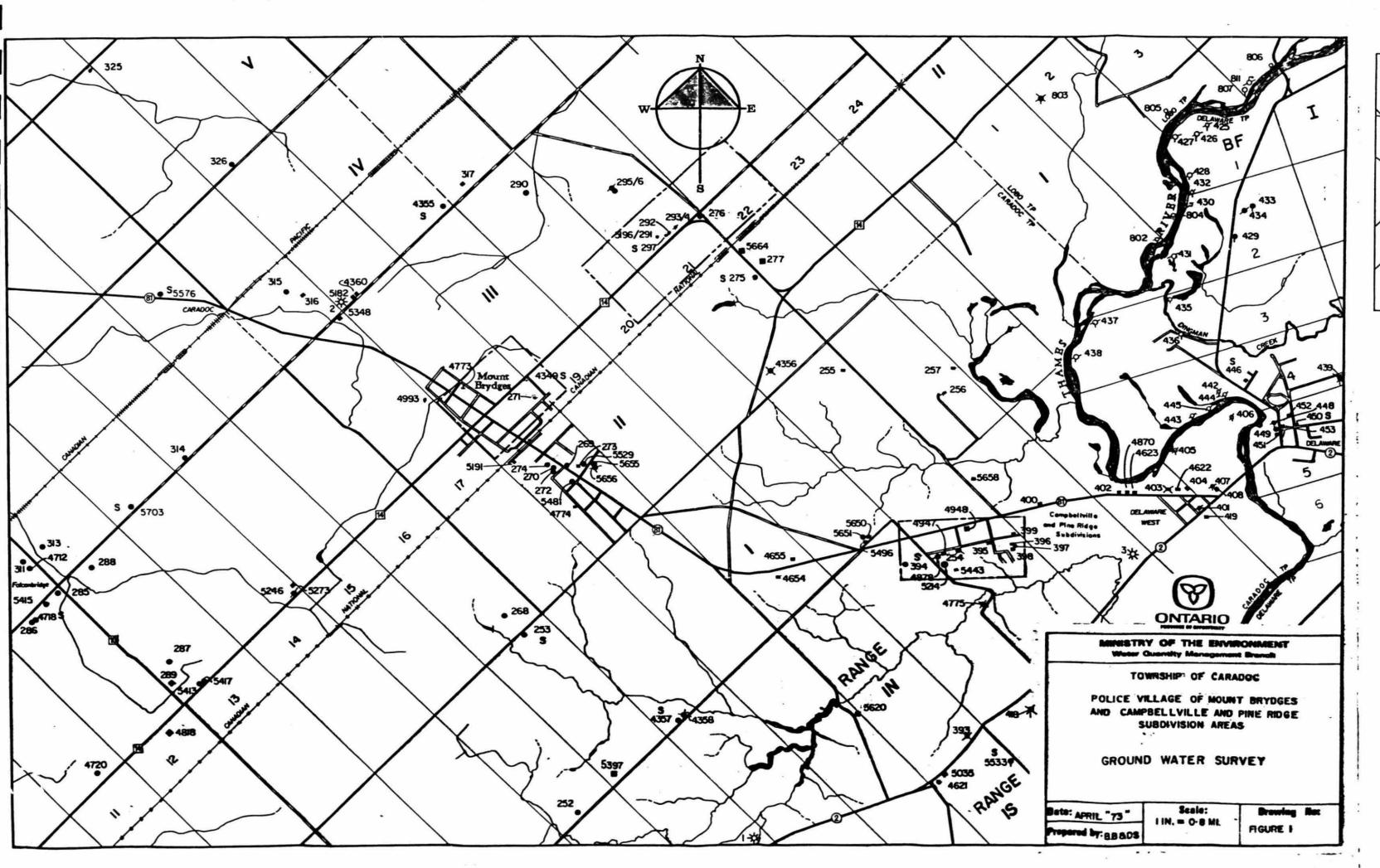
												Che	mical (	Constitue	ents in	parts p	er milli	ion (p	om)		
Source and	Location	Date Sampled	рН	Colour	Turbidity	Specific Conduct	Total Dissolved	Total Hardness	Alkalinity as	Chloride	Sulphate	Iron	Calcium	Magne-	Sodium	Potasium	i i	Nitrogen	os N		Remarks
Number				Hazen Units	Jackson Units		Solids (ppm)	as CaCO3 (ppm)		(CI)	(SO <sub>4</sub> )	(Fe)	(Ca)	sium (Mg)	'No;	( <b>K</b> )	Free Ammonia	Total Kjeldahl	Nitrite	Nitrate	TYPE OF
446	73 MEYERS	29 44A 73					440	332	245	47	30	KO.05	107	16	21	2.8	.01	-3/	.006	.22	Deprh 16'
4718	GOUGHY						410	344	265	9	76	0.60	109	ig	5	1.4	.07	.20	1004	.12	Overborden Depth 30
4349	Keay						420	404	267	26	108	ė. 95	123	23	5	8.2	.01	.22	.002	.01	Overburden Depth 21'
275	Van Hecke	"					450	388	286	6	78	<0.05	117	23	3	2.6	-01	.21	.002	3.6	Depth 18'
4355	Hekker	20					260	184	134	9	38	0.05	50	1/	3	12	-01	-12	.002	5.1	Overburden Deprh 18'
5397	I. Soetemans	,					420	352	234	18	81	0.10	96	27	5	1.9	-01	وه.	,006	3.1	Depth 19'
4357	P. Glockmer	6					1280	420	63	312	466	16	82	52	246	2.5	.29	.40	.002	•02	Depth 205'
5533	Lazaravioh	,					1900	1080	25	85	1115	12.0	216	131	119	6.7	.69	.60	.003	€,01	Bedrack Depth 340' In rock 42'
450	Poet Office	.,					310	272	228	n	32	0.10	86	14	6	2.1	-01	.20	.002	1.0	Overbuiden Deprh 20'
5703	Attridg e	APC 9/73					510	398	315	17	78	4.8	122	23	it	1	•30	.94	4.00	6<.01	Depth 37
297	Mostery	1,		27			170	158	178	1	3	6.25	30	20	13	1.3	·25	-27	.00	10.01	Depth 88
5576	Наррі	•,					240	254	180	30	49	c,95	74	17	8	1.1	40 ء	-11	.00	10.1	Deprh 68
3 Ø <b>4</b>	De Leemans	1					1260	608	105	140	640	0.45	84	97	156	46	.34	-44	.00	,01	Overburden Deprh 2:6 20-20

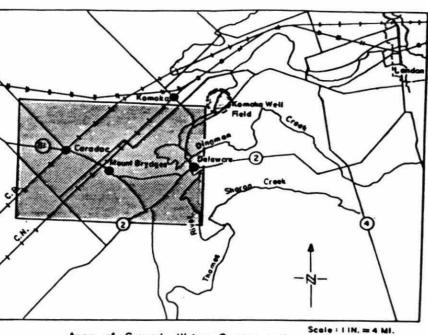
Date 3 May 1973

Prepared by

# Table 3 Summary of Oil and Gas Well Records

Well No	Location and Elevation			Owner	Driller	Well Type	Well Diameter (inches)	Depth (feet)	Static Level (feet)	Pumping Test (gpm) (hrs)	Level	Quality	Use	Remarks, Log, etc.
/	CARADOC.	/W.		CARADUC OIL SYNDICATE	Year S EARL KERRWO D OUT AUC 27/24		10-44 °	1328						DRIFT 231' DENAWARE SEC CONUMBUS 320 BUILTBLANK 570
					, ,									BASS ISLAND 790 -Continues - Water at Type: Static
														340 Sulphu: 40' 340 Sulphu: 40' 344 Salt 100'
Z.	CARADOC	īv	18	UNION GAS CO. OFCANADA LTD	- i43i			197						DRIFF 197 # 185
3	CARADIC TWP	IN	23	-	- 1915		84	1923						PRIFT 145 HAMILTON 171 GREY LS. 500 GYPSIM 525
														DARK GY LS 636 - Continues - Water 3t; Type: 80 Fresh
														22c Suiphor
					18									
7-049				a a										





Area of Ground Water Survey and Location of Komoka Well Field

# LEGEND

- Bored Well in Overburden
- Tory Bored Well in Overburden
- Drilled Well in Overburden
- P Drilled Well in Bedrock
- Abandoned Drilled Well in Overburden
- Abondoned Drilled Well in Bedrock
- Dry Drilled Well in Overburden
- Dry Drilled Well in Bedrock
- Q Test Hole in Bedrock
- Abandoned Test Hole in Bedrock
- Abandoned Flowing Test Well
- in Overburden
- Drilled Oil and Gas Test Well

Recommended Test Drilling Areas